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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 1

WASHINGTON, D. C., DECEMBER 16, 1924

WINTER 1924-25

REVIEW OF THE SNOWFALL CONDITIONS FOR THE SEASON
TO DATE

September.—Measurable amounts of snowfall were reported from high elevations in some of the western mountains, the greatest depth reported being 14 inches at a point in Colorado. Slight falls were reported in the mountains of northern New York and locally in North Dakota and other northern states.

October.—But little snow occurred during the month from the Rocky Mountains eastward. In the far West there was more or less snow, depending upon the elevation, over the central and northern portions, the amounts ranging up to 40 inches or more in the Sierra of central California and to nearly 60 inches at some of the high elevations in Oregon. In the main system of the Rocky Mountains the amounts ranged up to 30 inches at points in Colorado, and there was generally somewhat less to the northward.

November.—Snow fell on a number of dates in the Great Lakes region and to the eastward, and there were moderate falls in most other districts east of the Rocky Mountains as far south as the northern portions of Oklahoma, Arkansas, and Tennessee. In northern Michigan falls up to 20 inches were reported, and 10 inches or more occurred at points in northern New England. In the western mountain districts there was considerable snow over local areas, but no widespread storms seem to have occurred, and, on the whole, there was probably less snow than usual.

During the present month the atmospheric circulation has increased and several extensive storm areas, attended by snow, glaze, and rain have moved over the central valleys. That of the 4th and 5th over the middle Plains caused considerable interruption and damage to overhead communication in Nebraska and portions of adjacent States, and heavy falls of snow occurred over the northern portions of the storm area. Again from the 7th to 9th a widespread storm moved from the Southwest to the Great Lakes, attended by heavy rains in the Ohio Valley and portions of adjacent areas, and by more or less snow over the areas to northward of the storm center.

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

At this writing an extensive anticyclone is advancing into the central Great Plains and middle Rocky Mountain regions and severe cold prevails in those districts with prospects of sharp falls in temperature to the eastward and southward beyond the limits of the present slight snow cover over the northern portion of the winter wheat region.

DEPTH OF SNOW

Considerable depths of snow have accumulated in the upper Lake region, at points in eastern Nebraska, in the mountain regions of northern New York, and over northern New England. Elsewhere east of the Rocky Mountains there is only a slight snow cover, the southern limits extending only to northwestern Kansas and to northward of a line thence to southern Michigan, southern Pennsylvania, and central New England.

In the western mountains there is a moderate covering generally at the lower levels, except in the more southern portions; and in some of the high ranges considerable depths prevail, except in California.

ICE IN RIVERS AND HARBORS

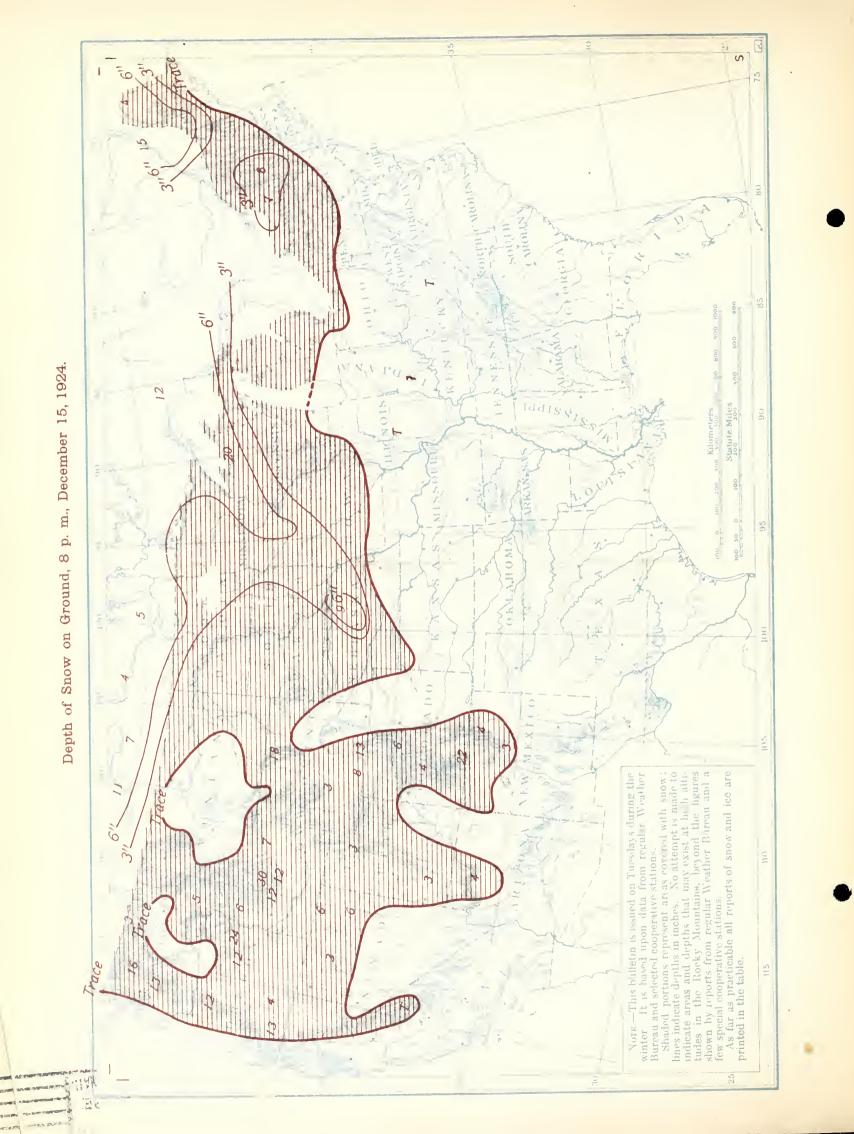
Due to moderate cold within the past few days over the northern districts from the upper Missouri Valley eastward, some ice has formed over the rivers of that region, as well as on the protected harbors of the upper Lakes. On the Missouri River the ice thickness ranges from 3 inches at Sioux City, Iowa, to 8 inches at Bismarck.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., DECEMBER 15, 1924

		Ice in rivers, har- bors, etc.			Ice in rivers, har- bors, etc.
Stations	₽	36 IS,	Stations	B €	Ce is,
	Snow	Ive bon		Snow	Ive ive bon
	1 02				H
A laska .	Inches.	Inches.	Nevada.	Inches.	Inches.
Eagle	20		Arthur	6	
Tanana	14		Elko	2	
Arizona.			Winnemucca	3	
Flagstaff	1		New Hampshire.		1.0
Grand Canyon	4		Concord	2 3	1.0
Crested Butte	4		Hanover Keene	2	
Cumbres	22		Pittsburg	6	
Dillon	6		New Mexico.		
Durango	2		Chama	5	
Idaho.			Des Moines	1	
Idaho City	2		Santa Fe	1 4	
Ketchum	12 6		Taos	3	
McCall Soldier Creek	12		Truchas	0	
Spencer	7		Albany	3	0.0
Vienna Mine	30		Beaver River	5	
Iowa.		,	Buffalo	0	*
Carroll	2		Corinth	3	
Charles City	T 4	3.0	Herkimer	8 3	
Des Moines Estherville	T. 5	3.0	Lowville	2	
Forest City	6		Oswego	3	†
Keokuk	Ö	1.5	Rochester	4	0.0
Sioux City	5	3.0	Rome	8	
Maine.	_		Syracuse	7	
Greenville	5 8	9.0	North Dakota. Bismarck	1	8.0
Millinocket	4		Devils Lake	6	
Van Buren	4		Williston	2	*
Massachusetts.			Oregon	00	
Holyoke	0	*	Baker Mine	28 12	
Williamstown Michigan.	1		Government Camp Imperial Mine	24	
Alpena	2	0.0	Lakeview	4	
Detroit	T.	+	Portland	2	0.0
Escanaba	_ 2	0.0	_ Pennsylvania		*
Grand Rapids	T.	2.0	Erie	T. 2	
Houghton Humboldt	11 18	2.0	Freeland	_ 4	
Iron Mountain	5		Huron	1	6.5
Ironwood	20		Pierre	T.	*
Mackinaw	1		Yankton	4	2.0
Marquette	10	*	Utah.	1	
Newberry	8 3	1.5	Duchesne Logan	1 6	
Saginaw	2	2.5	Milford	3	
Sault Ste. Marie	6	*	Modena	1	
Minnesota.			Provo	2	
Collegeville	6 7	7.0	Salt Lake City	3	
Duluth	2	7.0	Vermont Brattleboro	2	2.5
Leech Lake Dam	4		Northfield	1	
Minneapolis			St. Johnsbury	2	
Roseau	5 2 3	*	Washington.	10	
St. Paul	3		Cascade Tunnel	16 3	
Thief River Falls Virginia	2 2		Laurier	5	
Worthington	6		Spokane	T.	
Montana.			Stampede	13	
Haugan	1		Wisconsin.	T	6.0
Miles City	T.		Green Bay	T.	0.5
Nebraska. Broken Bow	7		La Crosse	1	0.0
Imperial	4		Dixon	8	
McCook	6		Dome Lake	18	
North Platte	1		Foxpark	13	
OmahaO'Neill	T.	‡	Newcastle South Pass City	3	
Tekamah	9		Yellowstone Park	6	
				1]

*Shore ice. †Floating ice. ‡Ice gorg

‡Ice gorged. § Measurement impracticable.
T. indicates trace.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 2

WASHINGTON, D. C., DECEMBER 23, 1924

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

At the beginning a great area of high barometric pressure, with attendant severe cold, had entered the Northwestern States and severe winter weather had overspread the Rocky Mountains and Great Plains sections as far south as Wyoming and Nebraska. To the eastward of the Mississippi River and generally over southern districts the weather continued mild for the season. As the week advanced, the cold area gradually extended southward and eastward and also westward toward the Pacific coast where some unusually low temperatures were reported, particularly in the far Northwest. As the anticyclone moved southward, a cyclonic area developed in the Plateau region and moved slowly to the southeastward, causing rain or snow over most of the mountain and Plateau districts and into the Great Plains, and by Thursday precipitation, mostly snow, had extended over nearly all northern and central districts to the eastward, and during the following two days covered most southern districts as well. At the same time, the cold wave was slowly advancing toward the Gulf States and eastern districts, reaching the lower Rio Grande Valley Saturday morning with temperatures several degrees below freezing. During the closing days of the week the cold wave steadily advanced over the eastern districts and by the end practically all portions of the country, except the Florida Peninsula and the far Southwest, had experienced freezing temperatures, and snow in variable amounts had fallen over most western and northern districts.

As the cold wave reached the more eastern districts there was a general lowering of the barometric pressure in the Northwest where, during most of the week, it had remained abnormally high, and temperatures, though still low, were rising and the first severe cold wave of the present season was slowly disintegrating.

DEPTH OF SNOW

Practically all western mountain districts had more or less snowfall during the week, and likewise most northern and central districts to the eastward had some snow, though the amounts were mainly small, except in portions of the lower Missouri and middle and upper Mississippi Valleys and Great Lakes region. Over portions of this area, particularly from Missouri northeastward to southern Michigan, freezing rains formed a heavy coating of ice which, with the snow, delayed traffic, greatly damaged overhead wire systems, broke down and otherwise injured fruit and shade trees, and left the ground covered with a heavy coating of ice. Over the districts from the Ohio Valley northeastward to New England there was some snow during the week, particularly toward the latter part, but on account of warmth early in the week there was considerable melting and the depths at the close were locally less than at the beginning.

In the western mountains considerable snow occurred over northern sections where the lower elevations are now well covered and good depths have accumulated in the higher ranges.

ICE IN RIVERS AND HARBORS

Over most western districts continued cold weather favored ice formation and the important rivers were closed in their more northern courses. On the Missouri the ice now ranges from 3 inches at Kansas City to 17 inches at Bismarck, and on the Mississippi it ranges from floating ice at Cairo to 12 inches at LaCrosse. The ice in New England has reached a thickness of nearly a foot in central Maine, but elsewhere in that region, as well as on the Hudson and its tributaries, the thickness is not above a few inches.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., DECEMBER 22, 1924

- 1						
	Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc,
	Arizona Flagstaff	Inches	Inches	Nebraska Auburn	Inches	Inches
	Pinedale	4 2		North Platte Omaha	1 6	17.0
	Huntington Lake Inskip Summit	25 19 38		Nevada Arthur	10 12	
	Yosemite	. 2		Austin North Fork Winnemucca	6 8	
	Denver Durango Grand Junction	1 4 2		New Hampshire Concord Hanover	2 3	5.0
- :	Leadville Idaho Boise	5 10		New York Albany	10 T.	2.0
)	Hailey Lewiston McCäll	8 2 12	*†	Beaver River Buffalo Poughkeepsie	6 2 2	*
	Mackay Pocatello Vienna Mine	2 6 44		Rochester	1 4 3	0.0
	Illinois Chicago	1		North Dakota Bismarck	2	17.0
	Griggsville	2 1 1	1.0	Devils Lake	6 4	12.0
	Iowa Charles City Davenport	6	8.0	Broken Arrow Oklahoma City Oregon	2 4	
	Des Moines Iowa Falls Keokuk	$\begin{bmatrix} 1\\4\\3 \end{bmatrix}$	7.0 6.5	Baker Imperial Mine Lakeview	35 6	
	Sioux City	5 1	10.0	Portland	T. 9	*
	Dodge City Iola	1 2	3.0	Erie	4	1.0
	Greenville	8 8	11.0	Huron	1	11.5
5	Portland	3	3.0	Yankton Utah Duchesne	3	9.0
	Battle Creek Cadillac Detroit	2 6 1	2.0	Logan	18 2 4	
	Escanaba	4 2 5	3.0	Vermont Brattleboro Burlington	1	6.0
	Houghton	16 10 9	7.0 6.0 4.0	Northfield	1 16	
,	Minnesota Collegeville Duluth	2 7	14.0	Laurier	3 2 8	
	Grand Meadow St. Paul Missouri	5 2	6.0	Walla Walla Wisconsin Green Bay	5	10.0
	Brunswick	6 6 4	4.5	La Crosse Madison	3 3	12.0
	Hannibal	2 5	3.0	Wausau	2	10.0
)	St. Louis	T. 4	†	Cheyenne	2 3 22	
	Havre	4 4 9		Evanston	8 6 2	
	Miles City	3		Yellowstone Park	14	

*Shore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable. T. indicates trace.

Depth of Snow on Ground, 8 p. m., December 22, 1924.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 3

WASHINGTON, D. C., DECEMBER 30, 1924

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The week just closed was one of marked weather changes, particularly with regard to temperature, which, on the whole, was below normal over practically all parts of the country, though warmer and colder areas moved from the Canadian Northwest in quick succession.

At the beginning there was a general warming up from the severe cold wave that had prevailed during the preceding week, and snow was falling over large areas in the mountain districts of the West and in portions of the central valleys, with general rains over the Gulf States. By Wednesday morning, however, much colder weather had overspread the West and Northwest, and precipitation had extended into all districts from the Mississippi River castward; heavy rains falling in portions of the Gulf and South Atlantic States, with snow, mostly light, over the northern districts.

High barometric pressure prevailed during the middle portion of the week over the Plateau region and severe cold overspread the far Southwest, freezing weather extending into the

central portions of Arizona.

During the latter part of the week another severe cold wave overspread much of the country from the Rocky Mountains eastward, but at the close there was a general moderation over all districts, though temperatures were still mainly low.

DEPTH OF SNOW

Over most districts from the Rocky Mountain regions eastward, where snow remained on the ground at the end of the preceding week, there were small increases in the snow depth due to light falls on several dates. Locally from the Dakotas eastward to Lake Superior, however, there were some decreases, amounting to 6 or 8 inches at points in Upper Michigan.

From the lower Missouri Valley northeastward to the lower Lakes the increases ranged up to 4 inches or more, reaching a foot or more over portions of Ontario to the northward of

Lake Erie.

In the Rocky Mountain region and generally over the eastern portions of the Plateau there were mainly moderate increases over the depths reported a week ago, particularly on the western slopes of the Rockies from northern New Mexico to the eastern portions of Oregon and Washington, where the depths are now 6 to 10 inches greater than a week ago.

In the mountains of California there was little or no snow during the week and some reductions were noted in the amounts now on ground as compared with a week ago, and similar conditions exist over the Cascades and other moun-

tains of western Oregon and Washington.

Compared with the snow-covered area as shown in the preceding issue, there has been little change during the week in the total area covered. Most of the northern and central portions of the winter wheat region had a moderate snow cover during the period of severest cold.

ICE IN RIVERS AND HARBORS

Due to continued cold, material increases in the ice thickness were reported from all northern rivers and lakes, and more or less ice has formed over most rivers of the Atlantic coast drainage from the James northward. In the Missouri the ice ranges from 5 inches at Kansas City to nearly 2 feet at Bismarck, and in the Mississippi it ranges from floating at Memphis to 16 inches at La Crosse.

Along the Atlantic coast the ice thickness ranges from 2.5 inches on the Potomac, at Washington, to 15 inches in southern New Hampshire. On the Great Lakes the harbors are closed, the ice thickness ranging from 5 to nearly 20 inches.

P. Č. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., DECEMBER 29, 1924

Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc.
Arizona Flagstaff	Inches 9	Inches	Montana Havre	Inches	Inches
Grand Canyon California Huntington Lake	9 24		Kalispell	18 3	
Squirrel InnSummit	2 34		Imperial	6 2 2	94.0
Cumbres	56 3		Omaha O'Neill	8	24.0
Grand Junction Steamboat Springs	12 4 18		ArthurElkoHylton	25 10 12	
Connecticut Hartford West Cornwall	Т.	5.0	New Hampshire Concord Pittsburg	2 12	15.0
Washington Idaho	0	2.5	New Mexico Chama Santa Fe	18 2	
Boise	T. 20	*†	Taos New York Albany	10 T.	3.0
Soldier Creek Vienna Mine	19 38		Buffalo	15 1 24	7.0
Cairo New Burnside Peoria	T. 2	8.0	Malone Oswego Rochester	16 7 2	11.0
Indiana Cambridge City Evansville	2		North Dakota Bismarck Williston	1 4	23.0 18.0
Indianapolis La Fayette Marion	3 4		Ohio Cleveland	2 2	8. 0 8. 5
Iowa Davenport	3 4	13.0	ToledoZanesville	3 2	5.0
Keokuk. Pocahontas Sioux City	8 3	11.5	Baker Mine	45 5	
Kansas Iola McPherson	2 3	5.0	Government Camp Imperial Mine Pennsylvania	20 40	
Topeka	9	14.0	Erie Harrisburg South Dakota	т.	8.0
Van Buren Michigan	9	0.0	Huron Yankton	Т.	16.0 13.0
Alpena	3 3 2	10.0 7.0 13.0	Kelton Logan Moab	6 15 8	
Houghton	8 18 6	12.0	Provo Salt Lake City Watson	12 10 5	
Lansing	2 10 4	4.0	Vermont Burlington Northfield	1 3	*
Saginaw Sault Ste. Marie	3	10.5	Wisconsin Eau Claire Fond du Lac	4 5	
DuluthFort Ripley	7 4	19.0	Green Bay La Crosse	2 1	12.0 16.0
MoorheadSt. PaulThief River Falls	1 2 8	20. 0 12. 5	Park Falls Spooner Wausau	14 8 2	14.0
Missouri Hannibal Kansas City	5 4	10.0 5.0	Wyoming Dome Lake Evanston	24	
Maryville	5 2 1	‡	Foxpark	14 6 13	

*Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.

Depth of Snow on Ground, 8 p. m., December 29, 1924.

SNOW AT

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 4

WASHINGTON, D. C., JANUARY 6, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The past week has been one of continued rapid changes in weather conditions, though, on the whole, they were not so pronounced as during recent previous weeks. Temperatures were mainly higher than during the preceding week.

The week brought widespread precipitation, particularly in the first half, during which time heavy rains occurred over the Gulf and South Atlantie States, turning to heavy snow and sleet in portions of the Middle Atlantic States, and to lighter snows in the Northeastern States. Some heavy rains occurred during this period along the coast districts of the far Northwest and snow, mostly light, fell over the western mountain regions and eastward over the Great Plains and most of the central valleys. The latter part of the week was mainly free from important precipitation and there was a general tendency toward more moderate temperatures, except in the far Southwest where unseasonable cold persisted.

DEPTH OF SNOW

Compared with the preceding week, there is mainly more snow in all districts east of the Rocky Mountains, save over parts of the lower Missouri, middle Mississippi, and lower Ohio Valleys where there is a slight decrease. Over the Middle Atlantie States from northern Virginia to southern New York there was generally heavy snow during the week and the depths in that section now range up to nearly 20 inches at points in eastern Pennsylvania. Elsewhere over the snowbound area east of the Rocky Mountains the increases during the week were usually slight, save in the upper Lake region where locally they ranged up to nearly a foot.

In the mountain areas of the West there were substantial increases at the high elevations of Idaho, Washington, and Oregon, though at the lower elevations there were mainly decreases as compared with the previous week, due probably to rain at the lower elevations, while higher elevations had snow. There were material increases at some of the high elevations of Colorado and Wyoming, but elsewhere in the main Rocky Mountain system the depths now reported are usually less than those of a week ago. In the mountains of California, Nevada and adjacent areas there appears to have been no appreciable snowfall during the week and the depths now reported are from 2 to 10 inches less than reported a week ago.

The snow-covered area remains similar to that of the preceding week, save over the Atlantic States where a considerable area, bare a week ago, now has a substantial covering, and in the upper Ohio Valley where a moderate sized area has lost its light cover.

ICE IN RIVERS AND HARBORS

Moderate winter weather during the week favored the formation of additional iee in the northern districts, but there was little, if any, addition to that previously formed over the more southern limits of the preceding week.

The Missouri and its tributaries are closed to northward of Kansas City. The Mississippi is gorged at St. Louis and, with its tributaries, closed to the northward.

Ice on the Great Lakes increased during the week from 1 to 8 inches, and the thickness in the protected harbors now ranges from a maximum of 15 inches on the lower Lakes at the eastern end of Lake Erie to nearly 2 feet at the western end of Lake Superior. There was little change in the ice conditions over the rivers of the Atlantic coast.

Iee harvest has begun in many sections and is progressing under favorable conditions.

> P. C. DAY, Meteorologist, in charge of Division.

SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 5, 1925					
		rar-			ar-
Stations	k	e ir rs, b s, et	Stations	₽	e in rs,h s, et
	Snow	Ice in rivers, har- bors, etc.		Snow	Ice in rivers,har- bors, etc.
	1 02		A	1	
Arizona	Inches	Inches	Nebraska	Inches	Inches
Flagstaff	$\frac{7}{2}$		Guide Rock	5 3	
Pinedale	ث		O'Neill	12	
Huntington Lake	22		Valentine	3	
Inskip Summit	12 29		New Hampshire Concord	3	14.0
Colorado	20		Hanover	5	
Durango	10		Keene	4	
Leadville	8		Pittsburg	12	
Dist. of Columbia	_		Bridgeton	5	
Washington Idaho	5	3.0	Newton	10	8.0
Hailey	11		New York		0.0
Pocatello	2		Beaver River	15	
Porthill	8 48		Binghamton Buffalo	3	15.0
Illinois			Canton	5	
Chicago Peoria	1 4	8.0	Herkimer	12	0.0
Indiana	4	0.0	New York Oswego	11	12.0
Fort Wayne	5		Saranac Lake	2	
La Fayette Marion	$\begin{bmatrix} 7 \\ 6 \end{bmatrix}$		Saratoga Springs Warwick	3 5	
Terre Haute	2	*†	North Dakota		
lowa	,		Bismarck	1	26.0
Albia	$\begin{array}{c c} 4 \\ 6 \end{array}$		Devils Lake Ellendale	3 4	
Davenport	2	13.0	Ohio	_	
Estherville	6 4	16.0	Cleveland	$\begin{array}{c c} 1 \\ 2 \end{array}$	8.0
Kansas	1	10.0	Toledo	5	10.0
Concordia	2		Oregon	ہ ا	
Iola Maine	3	4.0	Baker	5 34	
Greenville	13	15.0	Pennsylvania		
Houlton	6		Allentown	17	10.5
Millinocket Maryland	12		Erie	8	10.5
Baltimore	9	0.0	Holtwood	10	
Easton Frederick	8		Philadelphia Pittsburgh	$\frac{2}{2}$	0.0
Michigan	0		Scranton	4	0.0
Cadillac	11		Williamsport	5	
Detroit	6	7.0	Utah Duchesne	6	
Houghton	16	12.0	Logan	14	
Ironwood	16 13		Salt Lake City	8	
Menominee	2		Brattleboro	2	11.5
Saginaw	6	14.0	Burlington	4	*
Sault Ste. Marie	14	12.0	Virginia Buchanan	2	
Duluth	7	22.5	Culpeper	8	
Grand Meadow Leech Lake Dam	5 6		Woodstock	4	
Moorhead	2	20.0	Cascade Tunnel	52	
St. Paul	4	13.5	Laurier	16	
Missouri Brunswick	6		Spokane	7	
Columbia	4		Green Bay	2	18.0
Hannibal	3 3	11.0	La Crosse	$\frac{2}{1}$	18.0
Unionville	3	6.0	Park Falls	14	
Montana			Wausau	4	15.0
Belton	$\begin{vmatrix} 38 \\ 12 \end{vmatrix}$		Wyoming Casper	2	
Browning	5		Foxpark	29	
Kalispell	10		South Pass City	5	
Miles City	6		Yellowstone Park	16	
*Shore ice. †Floating	ng ice.	‡Ice g	orged. § Measurement im	practica	able.
		T indice	tes trace.		

Correction: Date of Chart, other side, should be January 5

Depth of Snow on Ground, 8 p. m., January 6, 1925

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 5

WASHINGTON, D. C., JANUARY 13, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

A general moderation of the severe weather existing over much of the country during the closing days of 1924, which had set in to some extent during the early part of the present year, continued into the week just closed, particularly in the early days when moderate winter weather prevailed in practically all sections, except the Southwest. The latter part of the week exhibited some speeding up of the cyclonic and anticyclonic movements, particularly over the more northern districts where changes to cooler and warmer were rather frequent, though not usually large. Also over the Atlantic and Gulf districts, where cloudy weather persisted, local heavy rains fell in the more southern sections and generally light snow, with more or less glaze, to northward.

Cold weather continued during much of the week over most southwestern districts where unusually low temperatures have persisted for a number of weeks, but in other portions of the country the week was mainly warmer than usual for midwinter.

DEPTH OF SNOW

No important changes in the snow depths over those of a week ago were reported, though small increases and decreases were fairly evenly distributed over much of the country from the Great Plains eastward. As a rule there was a fairly uniform reduction of from 1 to 4 inches in the snow depths over Kansas, Nebraska, and portions of adjacent States, and a similar reduction over a narrow area from Indiana, inclusive, to the lower Lake region and the Peninsula of Ontario.

In the upper Mississippi Valley, upper Lake region, and generally over New England and the adjacent Canadian Provinces there were usually small additions, though increasing toward the extreme Northeast where, in northern New England and locally in the Provinces of New Brunswick and Quebec, there is now from 5 to 10 inches more than a week ago.

In the Rocky Mountain region there was a tendency toward small increased depths, while in the Plateau, from northeastern Nevada and the adjacent portions of Utah northward over Idaho and the mountain regions of Oregon and Washington, there were fairly large increases, ranging up to 3 feet or more in the northern Cascades. In California, Arizona, and the adjacent portions of Nevada there seems to have been but little, if any, snow during the week and small reductions in the depths reported a week ago were noted in a few instances.

The snow-covered area remains largely as reported a week ago, a small area in eastern Colorado and western Kansas with a light covering then, now being bare, while there has been a slight extension of the area southward in Ohio and Indiana.

ICE IN RIVERS AND HARBORS

In the absence of important low temperatures during the week, there were usually only small increases in the ice thickness as compared with the previous week, and in a few cases actual decreases were reported.

The greatest increases occurred in the more northern districts where they ranged up to 4 inches, though in the northern portions of New England there was practically no change.

The Missouri and its tributaries from Kansas City northward continue heavily icebound, and to a less extent the Mississippi and its tributaries from St. Louis northward. The Ohio and most of its tributaries continue free of ice, at least the larger streams, but considerable ice has formed over rivers of the Atlantic Coast States from the Potomae northward.

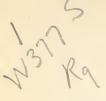
Ice of excellent quality is now generally available for harvest in all sections where large supplies are usually gathered, and that work is now making good progress in many sections.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 12, 1925

Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snaw	Ice in rivers, har- bors, etc.
A laska	Inches	Inches	Nevada	Inches	Inches
Cordova	22		Arthur	24	
Eagle	22		Elko	12	
Juneau Tanana	$\begin{array}{c c} 11 \\ 24 \end{array}$		Hylton	12	
California	-		Concord	3	15.0
Huntington Lake Summit	21 26		Pittsburg	22	
Colorado			New Jersey Elizabeth	10	
Cumbres	54 18		Lakewood	3	
Grand Junction	5		Sandy Hook	3	0.0
Rico	15		New York Buffalo	9	15.0
Hartford	2	7.0	De Ruyter	8	
New Haven	2 2	0.0	Fredonia	6 3	
West Cornwall	2		Malone	10	
Boise	5		New York Rochester	6 4	9.0
Hailey Soldier Creek	11 31		Roxbury	4	
Illinois			North Dakota		28.0
Chicago Peoria	2 4	9.0	Bismarck	3	28.0
Walnut	4		Ohio		
Iowa Charles City	5		Ashland	$\frac{1}{2}$	
Charles City Des Moines	T. 5	15.0	Sandusky	3	10.0
Keokuk	3	12.0	Toledo	5 4	12.0
Pocahontas	10		Zanesville	*	
Ellinwood	4		Government Camp	72	
Goodland	$\frac{12}{2}$		Ibex Mine	68	
Maine			Sled Springs	24	
Gardiner	9	14.0 15.0	Pennsylvania Harrisburg	6	11.0
Van Buren	16		Huntingdon	10	
Massachusetts Boston	1	0.0	Scranton	3	0.0
Holyoke	2	12.5	Utah	_	
Williamstown Michigan	2		Kelton Moab	8	
Alpena	5	13.5	Modena	1	
Escanaba	18	18.0 13.5	Provo Salt Lake City	12	
Houghton	19	10.0	Watson	6	
Iron Mountain	7	10.0	Vermont	2	13.0
Port Huron	3	10.0	Brattleboro Burlington	2	†
Duluth	7	24.0	Northfield	5	
Fort Ripley Roseau	7 6		Virginia Culpeper	6	
St. Paul	4	12.0	Woodstock	4	
Worthington Missouri	6		Wytheville Washington	2	
Hannibal	3	12.0	Cascade Tunnel	94	
Kansas City Lamar	1 3	8.0	Spokane Stampede	6 49	
Montana			Wisconsin		. ,
Belton	43 12		Fond du Lac Green Bay	3	19.0
Browning	5		Madison	3	13.0
Helena	$\frac{2}{12}$		Medford	6 5	17.0
Kalispell	7		WausauWyoming	Ð	17.0
Red Lodge	2		Casper	4	
Nebraska Imperial	5		Evanston Lander	9 5	
Omaha	T.	30.0	Newcastle	3	
O'Neill	10		Sheridan	1	
		-			

*Shore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable.

Depth of Snow on Ground, 8 p. m., January 12, 1925.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

No. 6

WASHINGTON, D. C., JANUARY 20, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The outstanding features of the weather during the week just closed were the heavy and continuous rains over the Southeastern States during the latter half of the week and the severe cold over northern New England at the close.

Beginning about Thursday light precipitation overspread the Southwest, and by Friday morning the unsettled conditions had advanced into the Mississippi and Ohio Valleys and to the south Atlantic coast, with heavy falls in portions of the Gulf States. During the remainder of the week precipitation was more or less continuous in the Southeastern States, extending at intervals into the Ohio Valley, Lake region, and other eastern districts, though the heavy precipitation was confined mostly to the Southeastern States where local floods prevailed, causing material property damage and some loss of life.

Temperature at the close of the week had become unusually low in the extreme northeastern sections of the country, points in northern New England reporting, in some cases, temperatures near the lowest of record, and in the adjacent portions of Canada readings of 50° or more below zero were reported.

Snow occurred at the beginning of the week from the upper Mississippi Valley eastward and over the far Northwest, near the middle of the week from the eentral Plains northeastward to the Great Lakes and New England, and over some eastern districts at the close. In most sections where snow occurred the amounts were small.

Temperatures during the week were mainly above normal over the districts from the Ohio Valley and Middle Atlantie States southward, and in the far West. Elsewhere this week was eold, particularly in northern New England, and over the middle Roeky Mountains and adjacent regions where unusually low temperatures have persisted for a number of weeks.

DEPTH OF SNOW

Generally speaking there were no important additions to the snow depths reported a week ago, save from the upper Lakes to New England where the increases were rather uniform and ranged up to 6 inches or more. Likewise in some of the mountains of Idaho, Oregon, and California there were local moderate increases, but at the same time near-by points had material decreases.

Over the southern mountain districts of the West there is generally less snow on the ground than has usually aeeumulated by midwinter; this seems particularly true of California and portions of near-by States where the stored depths are far less than usual at this period of the winter. Farther north, particularly in the mountains of Idaho, Washington, and northern Oregon, the snow depths, as well as the water contents, are reported as being above the normal.

Compared with the previous week the snow-covered area has not changed materially, save from Oklahoma northeastward to West Virginia where a moderate area with a slight covering a week ago is now bare.

ICE IN RIVERS AND HARBORS

Continued cold over the northern districts favored a small increase in ice thickness as compared with the preceding week on all rivers and lakes where it had previously formed, save over some of the middle Atlantic coast rivers where slight decreases are noted. The main increases occurred over the Great Lakes and in New England, where they ranged up to 4 inches.

Weather conditions were mainly favorable for ice harvest and this work progressed satisfactorily and is nearly completed in some locations, the quality being unusually good.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 19, 1925

Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc.
Arizona Flagstaff	Inches 5	Inches	New Hampshire Concord	Inches	18.0
Grand Canyon Pinedale	8 8		Hanover	8	
$California \ Inskip \dots \dots$	11		Bridgeton Newton	5	
Sierraville	34		Phillipsburg New Mexico	10	
Colorado Cumbres	51	[Chama Santa Fe	16	
DurangoGrand Junction	6		Taos	8	
Steamboat Springs Idaho	25		Albany	2 4	10.0
Boise	4 28		Beaver River	10 12	
Vienna Mine	56		Canton	6	
Indiana Fort Wayne	2		Ogdensburg	5 7	
La Fayette Notre Dame	2 5		Oswego Poughkeepsie	14	17.0
Jowa Davenport	1	15.0	Syracuse	7 4	
Des Moines Forest City	$\frac{1}{6}$	16.0	North Dakota Bismarck	1	29.0
Sioux City	2	19.0	Devils Lake Williston	$\frac{1}{2}$	23.0
Gardiner	12	18.0 16.5	Ohio Tiffin	1	
Millinocket Portland	25 9	0.0	ToledoOregon	4	12.0
Van Buren	21		Baker	5 66	
AmherstBoston	4 2	0.0	Lakeview	5 29	
Concord	5		Pennsylvania Emporium	3	
Alpena	8 6	14.0	Erie	3 T.	12.0
Detroit	6 5	12.0	Scranton	1 5	
Grayling	16		South Dakota	2	20.5
Iron Mountain Ludington	10		Huron Pierre	T.	18.5
Menominee	8	15.0	Yankton	2	18.0
Sault Ste. Marie Minnesota	17	16.0	Duchesne	8	
Duluth	7 6	26.0	Ogden Provo	16	
Minneapolis Missouri	8		Salt Lake City Vermont	8	
Columbia Hannibal	3 2	12.0	Brattleboro Northfield	7 9	15.0
Maryville	2		St. Johnsbury Washington	10	
Belton	40 24	 	Laurier	17 4	
Kalispell	10		Stampede	42	
Nebraska Auburn	3		Ashland La Crosse	8	18.0
Guide Rock North Platte	3		Milwaukee 'Park Falls	4 15	
Omaha	Т.	26.5	Wausau	9	18.0
Arthur	27 6		Dome Lake Evanston	30 9	
Elko	3 12		Foxpark	28 8	
North Fork	12		Yellowstone Park	16	
				1	4

*Shore ice. †Floating ice.

† 1ce gorged. § Measurement impracticable. T. indicates trace.

Depth of Snow on Ground, 8 p. m., January 19, 1925.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 7

WASHINGTON, D. C., JANUARY 27, 1925

Winter 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

Rapid changes in temperature over northern and a marked absence of precipitation over southern districts were the chief features of the weather during the week just closed.

The storm, central in the Ohio Valley and Middle Atlantic States at the beginning of the week, moved rapidly northeastward and no precipitation of importance occurred in any part of the country thereafter, except locally in the far Northwest and over the Florida Peninsula, until near the close. By Sunday morning, however, low pressure developed over the middle Pacific coast, the middle and southern Plateau, and into the adjacent Plains, and rains or snows, mostly light, had set in over the Pacific Coast States and the central portions of the Plateau. During the following 24 hours the precipitation area advanced into the central and northern Plains and, under the influence of low pressure over the Great Lakes, light snows had set in over that region.

By the close of the week light snow or rain had occurred over considerable areas from the Mississippi Valley eastward, and at this writing it continues over an extensive area from the lower Mississippi Valley northeastward.

The earlier part of the week had quick successions of colder and warmer weather over northern districts, though mainly within moderate limits. During the latter part there was a temporary break in the high pressure area so persistent over the Plateau and warmer weather overspread that region.

At the close of the week a pronounced cold wave had entered the northern districts between the upper Lakes and the Rocky Mountains, and temperatures from 10° to 30° below zero prevailed over the Dakotas and parts of adjacent States.

The average temperature for the week was above normal, except from the Great Lakes eastward, and in portions of the central and southern Rocky Mountain region.

DEPTH OF SNOW

Compared with a week ago, the snow depths have not changed greatly, as a rule. There is now from 2 to 6 inches more snow on the ground from southern Pennsylvania to New England, reaching as much as 10 inches or more at a few places in Pennsylvania, New York, and northern New England.

In other parts of the country from the Rocky Mountains eastward the increases and dccreases, as compared with the preceding week, were mainly small. From Nebraska and northern Kansas eastward to southern Michigan there is now mainly several inches less snow, while other districts show slightly more, as a rule, than was reported a week ago.

In the Rocky Mountain region there were local material increases in Colorado and Idaho, but mostly decreases elsewhere, particularly on the southern slopes and lower elevations in Montana and to the westward. No important changes were reported in the snow conditions of the Plateau and Pacific coast regions.

There is still an important lack of stored snow in the high mountains of California, although at some of the lower elevations the snow depths are reported as nearer the normals.

ICE IN RIVERS AND HARBORS

But few changes occurred in the amounts of ice on the lakes and rivers of the more northerly districts. In the northeastern States there were mostly slight increases, while some decreases were reported from the upper Lakes, the upper portions of the Mississippi River, and most of the Missouri River.

The ice harvest is nearing completion and a good supply of excellent quality has been secured in practically all sections where ice is usually stored.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 26, 1925

·					
Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc.
Alaska	Inches	Inches	New Jersey	Inches	Inches
Eagle	23	····	Elizabeth	9	
Juneau	21		Lakewood	1	
Tanana	20		Trenton	1	12.0
California	20		New Mexico	_	12.0
Inskip	13		Chama	14	
Summit	42		Clouderoft	4	
Colorado			Des Moines	2	
Cumbres	4.1		Truchas	9	
Denver	2		New York		
Dillon	17		Albany	4	11.5
Grand Junction	3		Binghamton	5	
Leadville	7		Buffalo	12	12.0
Rico	19		Cutchogue	3	
Idaho			De Ruyter	17	
Hailey	19		Malone	12	
Idaho City	24		New York	5	0.0
Ketchum	28		Rome	13	
McCall	32		Roxbury	11	
Porthill	12		Saranac Lake	12	
Soldier Creek	36		Syracuse	9	
Illinois	/m	7.0	North Dakota		20.0
Peoria	T.	7.0	Bismarck	2	30.0
Lowa City	5		Ellendale	T. 2	21.5
Forest City Keokuk	T.	13. 5	Ohio	1.	21.0
Pocahontas	6	10.0	Ashland	1	
Sioux City	2	16.5	Marion	î	
Kansas	-	10.0	Toledo	î	12.0
Iola	3	1.0	Oregon	,	
Liberal	2		Government Camp	55	
Wichita	3		Lakeview	5	
Maine			Wallowa	11	
Eastport	7		Pennsylvania		
Gardiner	15	20.0	Allentown	15	
Greenville	24	17.5	Erie	1	12.0
Maryland	1	0.0	Harrisburg	6	13.5
Baltimore	1 4	0.0	Mifflintown	4	• • • • •
Frederick	*		Rhode Island	1	
Alpena	7	16.0	Block Island	2	0.0
Cadillac	12		Kingston	4	
Escanaba	4	22.0	Providence	2	0.0
Grand Rapids	4		South Dakota		
Houghton	18	12.5	Huron	3	19.5
Ironwood	17		Pierre	4	19.0
Mackinaw	. 14	10.0	Rapid City	1	
Port Huron	5	13.0	Utah	1.4	
Minnesota Duluth	5	26.5	Logan	14	
Mankato	10	20. 0	Salt Lake City	6	
St. Paul	6	10.0	Vermont	U	
Thief River Falls	10	10.0	Brattleboro	13	16.0
Montana			Burlington	10	3
Belton	30		Northfield	12	
Browning	6		Washington		
Helena	2.		Cascade Tunnel	74	
Nebraska		8	Laurier	16	
Broken Bow	4		Yakima	2	
Columbus	1 6		Wisconsin Fau Claire	8	
McCook	1		Eau Claire	$\frac{\circ}{2}$	21.0
North Platte O'Neill	8		Green Bay	3	21.0
Nevada	0		Rhinelander	12	
Arthur	23		Wausau		18.0
Gold Creek	15		Wyoming	_	
McGill	1		Alta	34	
New Hampshire			Cody	1	
Concord	14	19.0	Foxpark	27	
Keene	10		Lander	5	• • • • • •
Pittsburg	26		Newcastle	3	

Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.
T. indicates trace.

Depth of Snow on Ground, 8 p. m., January 26, 1925.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 8

WASHINGTON, D. C., FEBRUARY 3, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The rapid changes in weather conditions, particularly in the temperature, such a notable feature of the weather for a number of weeks past, continued during the week just closed.

At the beginning low temperatures prevailed in the upper Mississippi Valley and Great Lakes region, and light snow or rain was falling over a considerable area from the lower Mississippi Valley northeastward to New England, while much warmer weather had overspread the Northwest. During the following few days the precipitation area over the eastern districts extended to the Atlantic coast, and by Thursday morning a disturbance of considerable intensity had developed off the Carolina coast. Within the following 24 hours this depression moved rapidly to the coast of Maine and heavy falls of rain, sleet, or snow attended its northward course, the snow being heavy from the Potomac River basin northeastward over the interior portions of Penusylvania, New York, and New England, and particularly so in the interior portion of New York. Near the coast the precipitation, though heavy, was mostly in the form of rain or sleet.

Severe cold again overspread the northern districts during the latter part of the week and low temperatures prevailed in the southeastern districts, frosts extending into northern Florida on the morning of the 31st. As the week closed, precipitation—mostly light, but locally heavy—occurred over most districts from the Mississippi River eastward, snow from the Great Lakes to New England, and mostly rain to the southward.

No important or widespread snow occurred in the western mountain districts during the week, but rains were frequent in the extreme Northwest and some snow occurred in the near-by mountains.

DEPTH OF SNOW

The heavy snow near the middle of the week over the Northeastern States added greatly to the depth of the cover previously existing, and depths of 2 to 4 feet now prevail from northern Pennsylvania to and including New England and the adjacent Canadian Provinces.

Over a considerable area from eastern Nebraska to Lake Superior the snow cover was increased from 2 to 4 inches, and there were some material increases in the mountains of Idaho and northeastern Oregon. Over most districts from the Great Plaius westward there was a very general reduction of the snow depths due to more moderate temperatures, and many of the valleys, lower elevations, and southern exposures are now bare.

No increases were reported from the mountains of California and the present outlook is distinctly unfavorable for a good supply of water during the coming summer.

High winds have drifted the snow badly over northern districts from the Dakotas to Michigan and, though the main thoroughfares are mostly open, the side roads are largely closed. The heavy snow in New York has blocked nearly all traffic, except the railroads, and they were hampered to some extent. The heavy snows in the mountains of that State, as well as in New England, have favored lumbering operations.

ICE IN RIVERS AND HARBORS

No important changes occurred in the ice conditions as compared with the preceding week, except for slight decreases generally in the upper Mississippi and its tributaries where there were losses up to 2 inches or more.

Conditions were favorable for continued ice harvest in all districts, except in the Northeast where heavy snow interfered with operations.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 2, 1925

1						
	Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc.
	Arizona	Inches	Inches	Nevada	Inches	Inches
	Grand Canyon	4		Arthur	13	1160168
i	Pinedale	3		North Fork	10	
į	California			New Hampshire		
	Huntington Lake	34		Concord	25	19.0
i	Inskip	5		Durham	31	
	Summit	36		Keene	16	
	Cumbres	34		Pittsburg New Mexico	36	
	Dillon	16		Chama	8	
	Leadville	9		Taos	6	
I	Connecticut	_		Truchas	8	
i	Hartford	7	14.0	New York	1.4	10.0
	New Haven West Cornwall	3 17	0.0	Albany	14	13.0
	Idaho			Ithaca	24	
	Hailey	20		New York	6	0.0
	Ketchum	31		Oswego	25	20.0
	Porthill	6		Plattsburg	30	
	Spencer Vienna Mine	22 72		Rochester	20 42	11.0
	Iowa	12		Rome	22	
i	Atlantic	2		North Dakota		
	Davenport	T.	12.0	Bismarck	3	30.0
	Des Moines	T.	15.0	Williston	2	25.0
	Estherville	4		Oregon		
l	Forest City	$\frac{7}{2}$		Baker Mine Harrison Mine	75	
	Iowa Falls			Hilgard	66	
ĺ	Eastport	11	0.0	Sled Springs	29	
l	Gardiner	23	21.0	Pennsylvania		
1	Greenville	30	17.5	Erie	4	14.0
Ì	Millinocket	29		Gettysburg	10	
	Portland Van Buren	32 23	0.0	Mifflintown	12 6	0.0
١	Massachusetts	20		Scranton	8	
	Boston	3	0.0	Towanda	24	
i	Concord	12		Williamsport	11	
ł	Williamstown	16		South Dakota		00.5
ŀ	Michigan	7	16.0	Huron	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	20.5
	Alpena	3	10.0	Pierre Yankton	4	19.0
Į	Detroit	1	14.0	Utah	1	10.0
١	Houghton	18	15.0	Duchesne	2	
l	Humboldt	21		Kelton	5	
l	Lansing	4		Manti	4	
I	Ludington	7		Park City	24	
	Saginaw	7	15.0	Vermont		
	Sault Ste. Marie	18	18.0	Brattleboro	22	18.0
	Minnesota	P-7		Burlington	28	16.0
	Collegeville	7	29.5	Northfield	26 22	
	Ely	16	29.5	Virginia	22	
	Leech Lake Dam	9		Culpeper	3	
۱	Moorhead	1	29.0	Woodstock	5	
ŀ	Roseau	6		Washington	04	
1	St. Paul	5	8.0	Cascade Tunnel	81 14	
l	Brunswick	1		Laurier	1.4	
۱	Kansas City	T.	7.0	Ashland	9	
	Montana			Fond du Lac	2	
1	Browning	8		La Crosse	6	19.0
1	Dillon	3	• • • • • •	Milwaukee	10	18.5
1	Kalispell	2		Wausau	10	18.5
	Nebraska	2		Dome Lake	33	
	Lincoln	2		Evanston	7	
ĺ	Omaha	4	21.0	Lander	3	
١	O'Neill	8	• • • • • •	South Pass City	9	• • • • • •
۱	Tekamah	6		Yellowstone Park	16	• • • • •
۱						

*Shore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable.

T. indicates trace.

Depth of Snow on Ground, 8 p. m., February 2, 1925.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 9

WASHINGTON, D. C., FEBRUARY 10, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The active cyclonic and anticyclonic circulation, features of the weather for a number of weeks past, underwent a decided slowing up during the week just closed and moderate weather prevailed in nearly all districts.

The storm over the Southeastern States at the beginning of the week moved eastward into the Atlantic without important precipitation and fair weather prevailed thereafter in all districts from the Rocky Mountains eastward until Sunday morning, at which time low pressure and threatening weather had overspread the central valleys.

During the following 24 hours the center of the disturbance had advanced to the upper Lake region and precipitation, mostly rain, had fallen over a wide area from the eastern Plains nearly to the Appalachian Mountains and from the Gulf to the Canadian boundary. At the close of the week the precipitation area had extended to the Atlantic coast; except for portions of the Northeastern States, however, the falls were mostly rain and generally light.

In the districts west of the Rocky Mountains there was rather frequent precipitation during the week, particularly in the far Northwest. Some heavy rains fell at the lower levels of central and northern California and to the northward, causing local floods, and indications point to considerable snow in some of the adjacent mountains.

The temperatures were nearly everywhere uniformly moderate, and the week, as a whole, was far warmer than usual, the averages exceeding the normal from 10° to 25° in the central valleys and most northern districts.

DEPTH OF SNOW

Unusual warmth for the season, with local rains, caused rapid melting of the snow cover over practically all central and eastern districts, particularly from the upper Mississippi Valley eastward. The heavy body of snow that occurred during the previous week over interior New York and the adjacent portions of Pennsylvania and New England was greatly reduced and traffic has now resumed nearly normal conditions.

From the Rocky Mountains westward there were moderate increases at some of the higher elevations, particularly in the Sierra Nevada and Cascade ranges and locally in Idaho and Colorado. There was continued melting at the lower elevations.

The snow-covered area was materially reduced during the week, and important depths east of the Rocky Mountains are now confined to the interior of the Northeastern States and the upper Lake region. Over the far West no important changes occurred in the snow-covered area, except for the gradual retreat of the snow line to higher elevations.

In the main it seems that the depth of the snow cover in the high western mountains remains distinctly below normal in the southern districts and over much of California, but it is normal or above in the northern districts.

The frost is out of the ground over most of the area not snow-covered, and the heavy coating of ice over Missouri and portions of other States that had remained on the ground for so many weeks disappeared during the week without evidence of important injury to the wheat crop.

ICE IN RIVERS AND HARBORS

Reduction in thickness was general, but not much break-up occurred, except in a few localities.

The ice harvest is practically completed and good supplies have been available in all sections where ice is usually stored.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 9, 1925

	1	1 2 1	1	1	1 1
		Ice in rivers, har bors, etc.			Ice in rivers, har- bors, etc.
Stations	M	rs,	Stations	₽	S. S.
	Snow	Ic ve		Snow	P P P P P P P P P P P P P P P P P P P
	3/2	1 22		1 02	T.
47 -7	T	72	3T T	T 1	
Alaska	Inches	Inches	New Jersey	Inches	Inches
Eagle	24		Elizabeth	6	- :
Juneau	31 20		Newton	T. 7	
Tanana	20		Sandy Hook	1.	117.5
Huntington Lake	35		Trenton	1	11.5
McCloud	8		Chama	10	
Summit	52		Des Moines	4	
Colorado	02		Raton	4	
Cumbres	49		Tres Piedras	5	
Dillon	14		Truchas	6	
Durango	1		New York		
Grand Junction	2		Albany	3	14.0
Leadville	8		Alfred	4	
Rico	15		Beaver River	30	
Idaho			Binghamton	6	, . ,
Hailey	25		Buffalo	1	5.0
Idaho City	30		Canton	12	
Ketchum	37		De Ruyter	24	
McCall	35		Herkimer	24	
Porthill	4		Ithaca	5	
Soldier Creek	50		Plattsburg	24	
Spencer	25		Poughkeepsie	4	
Vienna Mine Illinois	81		Syracuse	12	
Peoria	0	5.0	Warwick Watertown	10	
Iowa	0	0.0	North Dakota	12	
Davenport	T.	10.0	Bismarck	0	30.0
Dubuque	0	14.0	Williston	T.	23.0
Keokuk.	T.	9.0	Oregon	~.	20.0
Pocahontas	1		Government Camp	76	
Sioux City	T.	16.5	Hilgard	2	
Maine			Ibex Mine	72	
Eastport	7	0.0	Siskiyou	18	
Gardiner	26	20.0	Sled Springs	33	
Greenville	23	17.5	Wallowa	5	
Millinocket	28		Pennsylvania		
Portland	18	0.0	Emporium	3	
Van Buren	33		Erie	0	12.0
Maryland	0		Gettysburg	2 8	
Frederick	9		Gordon	4	14.0
Amherst	6		Mifflintown	3	14.0
Williamstown	6		Scranton	3	
Michigan			Towanda	12	
Alpena	T.	14.0	Utah		
Detroit	0	11.0	Duchesne	4	
Escanaba	T.	23.0	Logan	2	
Humboldt	6		Moab	2	
Ironwood	14		Park City	18	
Mackinaw	7		Sait Lake City	1	
Newberry	4	10.0	Vermont	4.4	10.0
Port Huron	T.	12.0	Brattleboro	11	19.0
Sault Ste. Marie	10	18.0	Northfield	17	
Minnesota	12		St. Johnsbury Washington	21	
Ely Leech Lake Dam	4		Cascade Tunnel	85	
Moorhead	T.	29.0	Laurier	11	
Roseau	1	23.0	Stampede	38	
Montana	_		Wisconsin		
Miles City	Т.	ł l	La Crosse	0	16.0
Red Lodge	3		Medford	3	
Nevada			Park Falls	5	
Arthur	11		Spooner	_ 6	
Hylton	10		Wausau	T.	14.0
North Fork	8		Wyoming	00	
New Hampshire	10	10.0	Dome Lake	33	
Concord	13	18.0	Evanston	8	
Durham	12		Sheridan	3	*** * * * *
Keene	14		South Pass City	10	• • • • • •
Pittsburg	33	.4	Yellowstone Park	13	

*Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.

Depth of Snow on Ground, 8 p. m., February 9, 1925.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 10

WASHINGTON, D. C., FEBRUARY 17, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The week just closed, like that preceding, was without marked features save that precipitation, mostly rain, was rather frequent during the first half from the Mississippi Valley eastward, and the coldest weather so far of the winter occurred near the middle in Florida.

At the beginning stormy conditions had advanced into the lower Missouri and middle Mississippi Valleys and during the following 48 hours extended to the Atlantic coast. Moderate to heavy rains occurred over the central and southern districts as the precipitation area moved eastward, and light snows were general over the Great Lakes, portions of the Ohio Valley, and adjacent areas to the eastward. At the same time precipitation had overspread the Pacific Coast States, and some heavy to excessive rains fell locally in northern California and considerable snow occurred on the higher mountains of that State.

The middle and latter portions of the week were mainly without important precipitation and moderate temperatures prevailed, except during Thursday and Friday when cold weather overspread the Southeastern States and killing frosts were reported from central Florida and light frosts almost to the southern extremity of the State.

Some light snows occurred Sunday in the northern Rocky Mountains, and by Monday a narrow area of light snow had extended eastward to the Great Lakes and light rains had fallen from the East Gulf States to New England.

The temperatures during the week averaged above normal in all parts of the country, save locally in Florida and portions of New Mexico, Colorado, and the upper Lake region.

DEPTH OF SNOW

Due to continued moderate temperature, with warm rains, much of the heavy snow cover from central Pennsylvania northeastward to New England disappeared during the week, eausing high waters in the smaller streams with local damage. In central New York and the adjacent portions of Pennsylvania and New England the decreases in the snow depths ranged up to nearly 2 feet.

Over the districts between the Rocky Mountains and the Great Lakes considerable snow melted during the early part of the week, but the occurrence of moderate falls later left the cover somewhat greater than was reported a week ago.

In the western Mountain districts continued warmth favored melting at the lower elevations, though slight increases were reported from some of the higher ranges.

In the Sierra of central California there were local increases ranging up to a foot or more, but in the mountains of Oregon, Washington, and Idaho the changes were almost universally toward decreased depths.

ICE IN RIVERS AND HARBORS

Warm weather, with rains, over the eastern portion of the country greatly reduced the ice thickness over the streams of the Atlantic Coast States south of New England and many have been cleared of ice.

In New England there was a general reduction in thickness, but the rivers still remain ice-bound. The harbors of the lower Lakes are free of ice in a few instances and a general reduction is noted in most others. The upper Lakes remain substantially as reported a week ago, except over Lake Superior where the amount of ice continued to increase. Not much change occurred in the Missouri, upper Mississippi, and other northern rivers, which continued mostly ice-bound.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 16, 1925

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1			in har- etc.			Ice in rivers, har- bors, etc.
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١	Stations	b>	S. S.	Stations	>	S. S.
1	Stations	Snow	Ice i rivers, bors, e	Stavions	Snow	IS TO IS
1		ă	# <u>2</u> 8		Ü	T 2 0
1		002	1 2		02	H
1						}
I	Arizona	Inches	Inches	Nebraska	Inches	Inches
-					_	1100100
.	Flagstaff	T.		Norfolk	3	
1	California			Omaha	T.	8
.	Huntington Lake	45		O'Neill	2	
١				m 1	_	
ı	Inskip	20		Tekamah	1	
1	McCloud	9		Nevada		
1	Summit	66		Hylton	8	
	37					
1	Yosemite	2		North Fork	4	
1	Colorado			New Hampshire	}	
	Cumbres	49			1	12.0
	Cumbies			Concord		
	Dillon	15		Hanover	8	
	Leadville	5		Pittsburg	22	
١	Connecticut	1		Many Marriag		1
ı	Connecticat	m		New Mexico		
-	Hartford	T.	12.0	Des Moines	1	
.]	Idaho		i I	Truchas	6	
		21	1	Man Wank		
	Hailey			New York		
	Idaho City	26		Albany	1	1 †
	McCall	33		Beaver River	24	
	Diamas City					1
	Pierce City	31		Binghamton	1	
	Vienna Mine	86		Buffalo	2	10.0
	Illinois			Canton	6	
		4				
	Chicago			Fredonia	2	
	Peoria	T.	*	Lowville	12	
	Rockford	4		Malone	3	
		4			_	
.	Walnut	4		Oswego	6	16.0
	Iowa			Rochester	T.	0.0
	Charles City	1		Rome	5	
	Dalance City	2		Trome	_	
	Dubuque		14.0	Roxbury	5	
,	Estherville	2		Saranac Lake	10	
	Forest City	1		Saratoga Springs	6	
	T City				0	
	Iowa City	1		North Dakota		
	Iowa Falls	2		Bismarck	T.	28.0
	Keokuk	1	9.0	Williston	T.	25.0
	Ci Cit			***************************************	1.	20.0
	Sioux City	T.	16.0	Oregon		
,	Maine			Government Camp	66	
	Gardiner	8	14.0	Ibex Mine	72	
		1		Gial-issa.		
	Greenville	11	16.0	Siskiyou	4	
	Houlton	15		Sled Springs	29	
	Millinocket	20		Pennsylvania		
		4			m	0.5
•	Portland	1 -	0.0	Erie	T.	9.5
	Van Buren	12		Freeland	4	
	Massachusetts	1		South Dakota		
,		1			T.	20.0
	Williamstown	1		Huron		
	Michigan			Pierre	1	19.0
	Cadillac	1		Yankton	T.	8
	Grand Rapids	2		Utah		· ·
					-	
	Grayling	5		Duchesne	1	• • • • • •
	Houghton	12	15.5	Winter Quarters	24	
,	Humboldt	6		Vermont		
		7			C	10.0
	Lansing			Brattleboro	6	19.0
,	Ludington	2		Burlington	4	10.5
	Mancelona	3		Northfield	6	
		4				
·	Newberry		1000	St. Johnsbury	12	
	Port Huron	1	12.0	Washington		
	Saginaw	2	12.0	Cascade Tunnel	75	
		4	1		32	
	St. Ignace		10.0	Stampede	92	
	Sault Ste. Marie	10	18.0	Wisconsin		
,	Minnesota			Brodhead	2	
	Duluth	1	28.5	Fond du Lac	2	
			1			19.0
	International Falls	6		Green Bay	0	13.0
	Leech Lake Dam	8		La Crosse	0	16.0
	Mankato	4		Madison	2	
					0	
	Moorhead	T.	30.0	Medford	3	
,	Roseau	1		Milwaukee	2	
	St. Paul	T.	*	Park Falls	7	
	Montana	1.				
		773		Wyoming	000	
	Bozeman	T.		Alta	29	
	Browning	T.		Evanston	7	
		3			2	
	Havre			Newcastle		
	Miles City	2		South Pass City	9	
	Red Lodge	2		Yellowstone Park	12	
				k		
		1			1	

*Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.
T. indicates trace.

Depth of Snow on Ground, 8 p. m., February 16, 1925.

N3775

SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 11

WASHINGTON, D. C., FEBRUARY 24, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

Unusually mild weather for a winter month prevailed in all parts of the country during the week just closed, as has been the case for several preceding weeks.

At the beginning a rain area had overspread the Southern States from eastern Texas to the Atlantic coast, though the falls were mainly light. By Wednesday morning this had passed into the ocean and fair weather prevailed in practically all portions of the country. This condition persisted very generally till Saturday, at which time another rain area of small proportions had overspread the middle Mississippi Valley and moved rapidly to the northeastward during the following 24 hours. Some snow attended this storm in the upper Lake region.

Quickly following this a storm of considerable intensity had moved to Kausas by Sunday morning and during the following 48 hours extended into the lower Lakes and thence to New England, and rains occurred over nearly all parts of the country from the Rocky Mountains eastward, the falls being light mostly, though heavy in portions of the middle Mississippi

and lower Ohio Valleys.

Near the end of the week rain overspread the far Northwest and by Monday night had extended eastward to the northern Rocky Mountains and southward over portions of the Pacifie Coast States, the falls being mainly light, however.

The mild weather prevailing throughout the week greatly favored outdoor work, and the ground moisture was mainly sufficient for present erop needs.

DEPTH OF SNOW

Continued warmth further reduced the remaining snow eover, though, in the absence of heavy rains, the melting proeeded rather slowly and no heavy run-off appears to have resulted.

In the Lake Superior district and thence westward to North Dakota there was some increase in the snow depths and there were large increases in the Canadian districts just north of New England. Elsewhere east of the Rocky Mountains the snow depths decreased and the snow had largely disappeared, except over central and northern New England, the mountain portions of New York, and in the upper Lake region.

In the mountains of the West there were some additions in the high Sierra of California, and locally in Oregon, Idaho, and northern New Mexico. There were local heavy falls in Arizona, particularly in the drainage area of the Roosevelt Reservoir, which promises considerable run-off and improvement in the outlook for water. In California more snow is needed, particularly in the southern mountain districts, to insure the summer water supply.

In the Canadian districts just north of the boundary, from Lake Superior to Montana, unusual snow depths still remain on the ground, a condition rarely existing at this period of the winter.

ICE IN RIVERS AND HARBORS

Despite the unusual warmth, some increases in ice thickness occurred in the Lake Superior region and locally in central Maine. Elsewhere there were frequently important decreases, particularly in the harbors of the lower Lakes and locally on the upper Mississippi River.

In the upper Missouri heavy ice remains, and it is still 12 to 15 inches in thickness on the upper reaches of the Mississippi and its tributaries.

The rivers of the Atlantic seaboard continue open south of the Hudson. To the northward they are still mainly elosed.

P. O. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P, M., FEBRUARY 23, 1925

	Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	rivers, har- bors, etc.
	A laska	Inches	Inches	Wontana	Inches	Inches
	Eagle	23	Inches	Montana Browning	T.	17507663
1	Juneau St. Paul Island	12		Haugan	16	
1	St. Paul Island	27		Miles City	T.	
1	Tanana	40		Nevada	7	
	Arizona Flagstaff	T.		Arthur Hylton	5	
	Grand Canyon	2		North Fork	3	
	Williams	$\bar{1}$		New Hampshire		
	California			Berlin	$\frac{2}{5}$	
	Huntington Lake	45		Pittsburg	21	
1	Summit	79		Woodsville	8	
	Colorado Cumbres	47		New Mexico	4	
	Dillon	18		Chama Elizabethtown	9	
	Leadville	3		Truchas	4	
	Rico	8		New York	770	
	Steamboat Springs	36		Albany Beaver River	T. 15	0.0
	Connecticut Hartford	0	+	Buffalo	0	9.0
	West Cornwall	T.		Canton .,	1	
	Idaho			Corinth	12	
	Hailey	25		Ogdensburg	0	†
	Idaho City Ketchum	24 35		Syracuse	1	
	McCall	34		North Dakota	_	
	Soldier Creek	44		Bismarck	T. 5	27.0
	Spencer Vienna Mine	27 72		Williston	0	22.5
	Iowa	12		Ohio		
•	Davenport	0	†	Cleveland	0	†
,	Des Moines	0	†	Sandusky	0	
	Dubuque	T. 0	12.0	Oregon	ŭ	'
	Estherville Forest City	T.		Baker Mine	72	
	Pocahontas	T.	1 1	Fish Lake	34 60	
	Sioux City	T.		Ibex Mine	80	
,	Kansas			Lakeview	1	
	Dresden	1		Siskiyou	$\frac{2}{25}$	
	Farmington	18		South Dakoia	20	
	Gardiner	T.	10.0	Pierre	_ 0	18.0
	Greenville	7	24.0	Yankton	T.	é
	Houlton	11 20		Winter Quarters	18	
	Portland	Т.	0.0	Vermont		
,	Michigan	T.	14.0	Brattleboro	T 0	100
	Alpena	T.	14.0	Burlington	T. 3	10.0
	Detroit	0	9.0	St. Johnsbury	7	
	Escanaba	3	25.0	Washington Casas de Transal	00	
	Houghton Humboldt	12	15.5	Cascade Tunnel	66 8	
1	Iron Mountain	4		Stampede	26	
	Ludington	1		Wisconsin		
	Mancelona	5 6	7.0	Eau Claire	$\begin{array}{c c} 2 \\ 1 \end{array}$	12.0
	Menominee	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1.0	La Crosse	ō	15.0
	Port Huron	. 0	8.0	Madison	T.	
	Saginaw	Т.	10.0	Medford	8	
	Sault Ste. Marie Minnesota	9	18.0	Wausau	$\frac{11}{2}$	12.0
	Collegeville	4		Wyoming	_	
	Duluth	1	28.5	Dixon	6	
	Fort Ripley Grand Meadow	$\frac{5}{2}$		Dome Lake Evanston	35 5	
	Leech Lake Dam	10		Newcastle	2	
	Moorhead	5	26.0	South Pass City	8	
	Roseau	2	• • • • • •	Yellowstone Park	11	
1						

*Shore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable.
T. indicates trace.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

No. 12

WASHINGTON, D. C., MARCH 3, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The mild weather that had prevailed so continuously during several previous weeks terminated suddenly near the beginning of the week just closed when a severe cold wave overspread the Northwest and moved rapidly eastward. This was quickly followed by a moderate rise in temperature, confined mainly to the northern districts from the Rocky Mountains eastward, but by Sunday morning colder weather had again set in over the northern districts, and at the end of the week nearly all central and eastern portions of the eountry were in the grip of a severe cold wave with freezing temperatures near or quite to the coast line of the Southeastern States. Warmer weather was following, however, and had reached the Great Plains and portions of the central valleys by the close.

The week, as a whole, was decidedly cold over practically all districts from the Rocky Mountains eastward, but moder-

ately warm weather was the rule in the far West.

Precipitation was rather frequent during the week, though mainly light, from the Great Lakes eastward, and snow occurred on several dates over the northern districts.

DEPTH OF SNOW

Increases in snow depth, as compared with the preceding week, were rather general from the northern Rocky Mountains castward, except locally in North Dakota and portions of Minnesota, though the week's fall was light, except in portions of the Great Lakes region and northern New England and in near-by Canada where the increases ranged up to 8 or 10 inches. In the western mountains local increases of several inches, and in some cases of more than a foot, occurred over portions of Wyoming, Idaho, and Montana, but elsewhere the snow depths generally decreased as eompared with the preceding week, but, as the cover is confined to the higher elevations, there was probably little actual runoff and the water content was doubtless but slightly diminished.

As compared with the preceding week, the snow-eovered area remains about the same in the mountain districts of the West, and the Great Plains still continue largely without a cover. However, a large area embracing the greater part of Missouri and thence northeastward over Illinois and Indiana to southern Michigan, also over the drainage basin of the upper Ohio, bare a week ago, now has an appreciable cover.

No improvement in the snow condition occurred in the mountains of California and adjacent States during the week and the outlook for a good supply of water for the coming sum-

mer is still unpromising.

The presence of a snow cover over important portions of the Winter Wheat Belt during the prevalence of the severe cold at the close of the week should prove beneficial in view of the material growth that had resulted from the extensive period of warmth immediately preceding.

ICE IN RIVERS AND HARBORS

The severe cold during the middle and latter parts of the week caused a general increase in ice thickness over the rivers and lakes where ice still remained a week ago, this being particularly true of the Great Lakes where the increases ranged up to 8 inches.

The upper Missouri remains icebound as well as other streams in the adjacent areas. The upper Mississippi is closed at Keokuk, Iowa, but floating ice is reported at several points to the northward. The rivers of New England remain about as previously reported, but some of the lower Lake harbors, open a week ago, are now closed. The harbors of the upper Lakes continue mainly heavily icebound.

P. C. DAY, Meteorologist, in charge of Division. SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 2, 1925

Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc.
	Inches	Inches	Nevada	Inches	
Huntington Lake Inskip	18 64		Hylton	3	
Summit	64		New Hampshire Concord	3 5	8.0
Cumbres	39		Hanover	5	
Dillon	$\frac{20}{2}$		Keene	23	
Pierce City	28		New Mexico	3	
Spencer	30		Elizabethtown	9	
Vienna Mine Illinois	78		Tres Piedras	4 5	
Casey	2		New York		
Decatur	2		Beaver River	15	
Peoria	3	8	Binghamton	1	
Pontiac	2		Buffalo	1	12.0
Springfield	1		Canton	$\frac{2}{12}$	
Indiana Cambridge City	2		Corinth	3	
Cambridge City Fort Wayne	5		Herkimer	1	
Indianapolis	1		Malone	9	
La Fayette	2		Oswego	10	3.0
Marion	3		Plattsburg	2	
Notre Dame	4		Roxbury	1	
Royal Center	3		Saranac Lake	6	
Terre Haute	1	0.0	Syracuse	1	
Dubuque	T.	12.0	Bismarck	0	27.0
Estherville	1		Devils Lake	3	
Keokuk	Т.	4.0	WillistonOhio	0	23.0
Eubank	2		Ashland	1	
Greensburg	1		Cleveland	1	8.0
Maine			Marion	1	
Gardiner	6	7.0	Sandusky	T.	3.0
Greenville	17	24.0	Tiffin	1	***
Houlton	8		Toledo	2	*
Portland	1 18	0.0	Pennsylvania	3	
Van Buren Michigan	10		Emporium	1	3.5
Battle Creek	4		Freeland	1	0.0
Detroit	2	5.0	Mifflintown	ī	
Escanaba	4	27.0	State College	3	
Grand Haven	4		Vermont		
Grand Rapids	2		Brattleboro	5	*
Houghton	12	20.5	Burlington	6	11.0
Lansing	3		Northfield	8	
Mackinaw	10	10.0	St. Johnsbury Washington	8	
Marquette	1	10.0	Cascade Tunnel	70	
Saginaw	4	12.5	Laurier	4	. ,
Sault Ste. Marie	9	19.0	Stampede	24	
Minnesota			West Virginia		
Duluth	4	29.5	Elkins	3	0.0
Fort Ripley	6		Parkersburg	T.	0.0
International Falls	6		Wisconsin	9	
Minneapolis	1 3	96.0	Ashland	т. Т.	13.0
Moorhead St. Paul	1	26.0	Green Bay La Crosse	0	16.0
Missouri	1		Medford	5	10.0
Clinton	2		Park Falls	14	
Hannibal	1	†	Wausau	3	17.5
Kansas City	1	†	Wyoming		
Rolla	1		Alta	34	
Montana			Dome Lake	52	
Browning	2	• • • • • •	Evanston	5	• • • • • •
Red Lodge	3		Foxpark	19	
Auburn	1		Sheridan South Pass City	7	
Norfolk	1		Yellowstone Park	12	
	•	,	J. J		

*Shore ice. †Floating ice. †Ice gorged. §Measurement impracticable.
T. indicates trace.

Depth of Snow on Ground, 8 p. m., March 2, 1925.

NO:175

SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 13

WASHINGTON, D. C., MARCH 10, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The severe cold existing over the eastern districts at the close of the preceding week moved slowly southeastward, and frosts occurred on several days over the Southeastern States during the early part of the week just closed. Warmer weather had already set in, however, over the Northwest and, as the week advanced, overspread practically all portions of the country and continued until the close of the week, except along the northern border and in the far Northwest where there were slight interruptions.

The week, as a whole, was warmer than normal over all parts of the country, except near the South Atlantic coast, over the Florida Peninsula, in most of California, and along the North Pacific coast. The week was mainly warm throughout in the central valleys where the departures from normal ranged from $+10^{\circ}$ to $+15^{\circ}$ per day. The latter part of the week was unusually warm in most central and southern districts east of the Rocky Mountains.

The week, as a whole, was mainly dry over the greater part of the eountry, though showers prevailed about the middle of the week from the east Gulf States to New England. Snow or rain set in over some of the mountain districts of the Southwest during Saturday and Sunday and extended to the middle and northern Plains and upper Mississippi Valley by the close of the week; the amounts were usually small, however.

Drought conditions prevailed during the week over most of the middle and southern Plains States and in portions of the lower Mississippi Valley, but some relief was afforded by the snow and rain in portions of the far Southwest.

DEPTH OF SNOW

Over all districts from the Rocky Mountains eastward, save in Montana and portions of North Dakota and locally in the Lake Superior region, there was no increase in the depth of the snow cover, and considerable reduction in depth occurred over this area where appreciable amounts covered the ground a week ago.

During the latter part of the week eonsiderable snow fell in the mountains of south and eentral California and thenee over Arizona, Nevada, and Utah to northern New Mexico and western Colorado. At the same time there were some light snows farther northward, and by the end of the week eonsiderable snow had accumulated in Montana, western North Dakota, and the adjacent portions of the Canadian Northwest, the depths in the latter districts being unusually large for this period of the year.

The snow-covered area diminished very materially over the eastern two-thirds of the country and an appreciable cover is now confined almost entirely to the interior and northern portions of New England and near Lake Superior. Over North Dakota and Montana, mostly bare a week ago, there is now a considerable snow cover. In the far West there has been no material increase in the snow-covered area, though the depths are mainly greater.

The moderate snow or rain over the Southwest materially relieved the drought conditions in Arizona and portions of southern California and improved the outlook for water in those areas.

ICE IN RIVERS AND HARBORS

Under the influence of moderate temperatures over the northern districts, there were no important changes in the ice conditions as compared with those of a week ago.

The iee, where it still remains, is melting slowly and passing out of the streams without gorging or flooding.
P. C. DAY,

Meteorologist, in charge of Division.

SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 9, 1925

Stations	Snow	Ice in rivers, har- bors, etc.	Stations	Snow	Ice in rivers,har- bors, etc.
A laska	Inches	Inches	Nevada	Inches	Inches
Eagle	22 5		Arthur	4 9	
Tanana	30		Elko	3	
Arizona Flagstaff	2		McGill	3 4	
Grand Canyon	1		New Hampshire	10	
Williams	1 5		Berlin	10 T.	7.0
California	8		Hanover	5 32	
Cascada	49		Pittsburg	3	
Inskip	21 5		New Mexico	8	
Summit	76		Tres Piedras	2	
Yosemite	3		Truchas New York	1	
Cumbres	69		Buffalo	0	10.0
Dillon	15		Corinth	11 3	
Leadville	4 20		Lowville	1 1	
Rico Steamboat Springs	24		Ogdensburg	2	0.0
Idaho	21		North Dakota Bismarck	1	27.0
Hailey	20		Devils Lake	4	
Ketchum	28 36		Williston	8	21.0
Pierce City	26		Detroit	2	
Soldier Creek	39		Fish Lake	30 68	
Vienna Mine	72		Hilgard	1	
Maine Gardiner	2	5.0	Ibex Mine Siskiyou	70 2	
Greenville	17	25.0	Sled Springs Welches	24	
Millinocket	22		Pennsylvania		
Van Buren	25		South Dakota	0	4.0
Detroit	0	4.0	Huron	0	12.0
Escanaba	3	27.0	Pierre	0	18.0
Humboldt	10 21		Logan	1 3	
Ironwood	8		Park City	24	
Mancelona	3 4		Provo	4	
Maple Ridge	0	10.0	Vermont		1
Newberry	T. 8	5.0	Brattleboro Burlington	T. 0	10.0
St. Ignace	3		Northfield	2	
Sault Ste. Marie Minnesota	6	20.0	St. Johnsbury White River Junct'n.	5 3	
Duluth	2	28.0	Washington	59	
Ely Falls	5		Cascade Tunnel Stampede	19	
Leech Lake Dam Moorhead	T. 4	27.0	Wisconsin Green Bay	0	9.0
Roseau	1		La Crosse	0	8
St. Paul Thief River Falls	0	*	Medford	1 10	
Virginia	4		Rhinelander	6	11 0
Montana Bozeman	5		Wausau	T.	11.0
Browning	5		Alta	36	,
Haugan Havre	11 3		Cody Dome Lake	40	
Helena Lewistown	2 2		Evanston	7 18	
Miles City	2		Newcastle	2	,
Red Lodge	4		Yellowstone Park	15	4

*Shore ice. †Floating ice.

‡Ice gorged. § Measurement impracticable. T. indicates trace,



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 14

WASHINGTON, D. C., MARCH 17, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The weather of the week was mainly of the type usually experienced during March, considerable variations occurring in temperature, some heavy rains in central districts, and moderate amounts of snow to the northward.

At the beginning of the week a moderate precipitation area was passing northeastward over the Lake Superior district and light snow or rain had occurred over considerable areas in the western mountains and over the northern border States. By Friday another precipitation area had advanced to the middle Plains and light snows had again occurred in the Rocky Mountain area and locally in the middle Plains, and some local heavy rains had fallen in the lower Missouri Valley. During the following 24 hours the storm moved to the lower Lakes, attended by moderate to heavy local snows over a wide area from Iowa and portions of near-by States to the Great Lakes, while heavy rains fell locally to southward.

Following this an area of high pressure with severe cold for the season overspread the districts between the Great Lakes and Rocky Mountains, and by Saturday morning freezing weather had extended southward to central Texas. This cold area advanced southward and eastward, but lost much of its severity before reaching the important fruit and truck

regions of the South and Southeast.

By the close of the week weather conditions had become more favorable and moderate spring temperatures prevailed in practically all portions of the country. The week, as a whole, was decidedly warm over the east Gulf and Atlantic coast districts and correspondingly cold from Kansas and Colorado northward into Canada. Over the Plateau and Pacific States the temperature conditions during the week were near normal, and there was little precipitation.

DEPTH OF SNOW

The considerable fall of snow during Friday and Saturday, referred to above, had largely melted by the close of the week, though over portions of central and northern Iowa, and thence to southern Wisconsin and portions of Michigan, substantial depths still existed locally. There were local increases during the weck in northern New England, mostly in Maine, and at a few points in the middle Rocky Mountains and the far Northwest. Not much change occurred during the week in the snow-covered area near the northern boundary, but a considerable area from Iowa and southern Minnesota to Michigan, bare a week ago, now has a moderate cover.

In the western mountain States the snow-covered areas are confined to the more elevated portions, where changes are usually slight from week to week. Here the snow-covered areas remain about as reported a week ago, although by settling or otherwise the depths are mainly less, particularly in California where the loss ranged up to a foot or more.

ICE IN RIVERS AND HARBORS

Not much change occurred in the ice as compared with the preceding week.

The conditions in the Great Lakes are set forth in the following statement from the official in charge at Detroit, Mich.:

Field at west end Superior extends out 7 miles; moving fields over center; St. Marys River closed and solid. Green Bay solid, except path of car ferries. No ice along west shore of Michigan nor east shore to beyond Manistee; field extends from Charlevoix to straits where ice averages 12 inches and smooth. Huron, fields over north and center. Rivers and Lake St. Clair open; Erie open west portion; fields east portion extend to Buffalo; car ferries running between Conneaut and Port Stanley; Ontario, ice fields confined to extreme east portion.

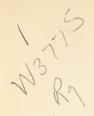
> P. C. DAY. Meteorologist, in charge of Division.

SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 16, 1925

4.1

	Stations	Snow	Ice in rivers, har bors, etc.	Stations	Snow	Ice in rivers, har- bors, etc.
	A laska	Inches	Inches	Montana	Inches	Inches
1	Cordova	16		Bozeman	2	
	Eagle	23		Haugan	10	
ı	Juneau	6		Havre	T.	
	Tanana	30		Lewistown	_ 2	
	California	1		Miles City	T.	
	Huntington Lake	43		Red Lodge	4	
1	Mount Wilson	T.		Nebraska	m	
1	Summit	58		North Platte,	T.	
1	Colorado	0.5		Omaha	T.	†
	Crested Butte	25	[Nevada	3	
	Cumbres Dillon	82 16		Arthur	4	
	Leadville	10		Hylton	3	
	Steamboat Springs	26		North Fork	4	
'	Idaho			New Hampshire	1	
	Hailey	18		Berlin	4	
	Idaho City	17		Hanover	3	
	Ketchum	26		Pittsburg	28	
	McCall	35		Woodsville	2	
	Mascot Mine	51		New Mexico		
	Pierce City	27		Chama	9	
į	Soldier Creek	38		Elizabethtown	T.	
١	Spencer	32		New York		
ĺ	Vienna Mine	72		Alfred	T.	
	Iowa			Beaver River	6	
	Carroll	1		Buffalo	0	10.0
	Charles City	T.		Canton	T.	
i	Des Moines	T. T.	0.0	Ithaca Ogdensburg	T.	
	Dubuque	1.	†	North Dakota	1	
	Estherville	2		Bismarck	T.	26.0
	Iowa Falls	7		Williston	4	21.0
	Marshalltown	2		Oregon	_	
	Pocahontas	3		Baker Mine	60	
	Sioux City	T.	+	Government Camp	73	
	Maine		i '	Harrison Mine	66	
	Eastport	2	0.0	Ibex Mine	70	
1	Gardiner	4	‡	Sled Springs	26	
i	Greenville	17	29.0	South Dakota		*
	Houlton	10		Huron	0	11.5
	Millinocket	20	:	Utah	/D	
	Portland	T.	0.0	Modena	T.	
1	Van Buren	26		Park City	24	• • • • • •
	Michigan	Т.	4	Winter Quarters	0	
	Alpena Detroit	T.	0.0	Burlington	T.	7.0
	East Tawas	3	0.0	Northfield	2	
	Grand Rapids	T.		St. Johnsbury	4	
1	Grayling	11		Washington		
	Houghton	14	22.0	Cascade Tunnel	60	
1	Humboldt	10		Spokane	Т.	
	Ironwood	10		Stampede	18	
1	Lansing	T.		Wisconsin	_	
1	Mackinaw	3		Fond du Lac	5	
ı	Maple Ridge	2	10.0	Green Bay	_m 1	9,0
ı	Marquette	2	12.0	La Crosse	T.	Ş
ı	Newberry	7	*	Madison	$\frac{4}{3}$	
١	Port Huron	T.	2.0	Milwaukee	4	• • • • • •
ı	Saginaw	3		Wausau	T.	10.0
	Sault Ste. Marie	4	22.0	Wyoming	1.	20.0
	Minnesota	1	22.0	Alta	32	
	Duluth	T.	29.5	Cheyenne	Т.	
	Ely	12	20.0	Cody	1	
	Grand Meadow	2		Dome Lake	42	
	Leech Lake Dam	3		Evanston	4	
	Mankato	1		Foxpark	18	
1	Moorhead	T.	24.0	South Pass City	4	
	Roseau	6		Torrington	1	• • • • • •
	Virginia	2		Yellowstone Park	14	
1						

*Bhore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU CHARLES F. MARVIN, Chief

No. 15

WASHINGTON, D. C., MARCH 24, 1925

WINTER 1924-25

GENERAL SUMMARY OF THE WEATHER DURING THE WEEK

The outstanding feature of the weather during the week was the series of severe tornadoes on the afternoon of Wednesday, March 18, in southern Illinois and Indiana and adjacent States, with attendant losses of hundreds of human lives and millions

of dollars' worth of property damage.

The general storm in which these tornadoes had their origin developed in the far Northwest and, advancing southeastward without material precipitation, was central Wednesday morning over northern Arkansas, whence it moved rapidly to the lower Lakes during the following 24 hours and to the St. Lawrence Valley by Friday morning. It was attended by general precipitation over nearly all districts from the Mississippi River eastward, some snow falling in the Lake region and heavy rains locally in the Ohio and middle Mississippi Valleys and in portions of the Gulf States.

Aside from the precipitation accompanying this storm, there was but little rain or snow during the week, except about Friday and Saturday when considerable snow fell along the northern border from the Rocky Mountains to Lake Superior. This storm was reported as being particularly severe over the adjacent Canadian Provinces where it assumed the character

of a blizzard with heavy snow and high winds.

The week was mainly warm throughout, the average temperature being above the normal over all parts of the country, and decidedly so in the central valleys and western mountain regions.

DEPTH OF SNOW

The generally mild weather favored rapid melting of the snow cover still on the ground at the end of the preceding week, and practically all that fell during the week in the Great Lakes region melted before the close.

Appreciable depths of snow are now reported only from extreme northern New England, locally in the Adirondacks of New York, in the Lake Superior region, northern Minnesota, and the high mountains of the West.

The continued warmth decreased materially the snow in the western mountains, the depths now ranging up to a foot

or more less than those reported a week ago.

At the close of the season for important snowfall in the western mountains the reports indicate that the prospective water supply is reasonably good over the northern and central portions. Farther south, however, particularly in Arizona and most of New Mexico, the situation is not so favorable, and a considerable shortage is in prospect as compared with average conditions. In California the outlook is poor, on the whole, though considerably less so than at this time a year ago, especially in the northern third of the State.

Over the Canadian Provinces adjacent to the northern boundary of the United States unusual depths of snow now prevail, particularly to the northward of Minnesota, North Dakota, and Montana where usually little snow remains at this period of the year. The snow cover is likewise heavy to the northward of Lake Superior and thence eastward to the

St. Lawrence.

Compared with a year ago, there is now less snow over the northern districts than was then the case, and the snow-covered area in the western mountains is now much less.

ICE IN RIVERS AND HARBORS

The ice has generally moved out of the principal rivers where it still remained a week ago, save on the Missouri at points in North Dakota where it is still intact and of heavy thickness; also in the interior of Maine where the rivers and lakes remain heavily covered.

SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 23, 1925

1 5.1

Stations	Snow	Ice in rivers, har bors, etc.	Stations	Snow	Ice in rivers, har bors, etc.
Alaska	Inches	Inches	Nevada	Inches	Inches
Cordova	1	17107163	Arthur	1	
Eagle			Hylton	T.	
Juneau	1		North Fork	T.	
St. Paul Island	6		New Hampshire	m	
Tanana	26		Berlin	T.	
California	99		Hanover	Т.	
Huntington Lake Summit		,	Lancaster	27	
Colorado	00	,	West Stewartstown	8	
Crested Butte	15		New Mexico		
Cumbres	61		Chama	5	
Dillon			Tres Piedras	T.	
Rico			New York	0	
Steamboat Springs	23		Beaver River	6	9.0
Hailey	12		Buffalo	T.	9.0
Idaho City	12		North Dakota	1.	
Ketchum	19		Bismarck	0	25.0
Mascot Mine	49		Devils Lake	T.	
Montpelier	2		Williston	T.	3
Pierce City	20		Oregon	10	
Soldier Creek			Fish Lake	13 67	
Spencer Vienna Mine			Government Camp Harrison Mine	72	
Maine	- 00		Ibex Mine	72	
Farmington	10		Sled Springs	23	
Greenville	16	29.5	South Dakota		
Houlton			Pierre	0	*
Van Buren	22		Utah	1	
Michigan Alpena	T.	0.0	Logan Vermont	1	• • • • •
Escanaba		27.0	Burlington	T.	8
Houghton	7	21.0	Northfield	T.	
Humboldt	4		St. Johnsbury	1	
Ironwood	7		Washington	~ 0	
Marquette	T.	12.0	Cascade Tunnel	50	
Newberry Sault Ste. Marie	2 2	21.0	Stampede Wisconsin	8	
Minnesota	2	21.0	Park Falls	5	
Duluth	0	26.0	Rhinelander	1	
Ely			Wausau	0	5.0
Fort Ripley	T.		Wyoming		
International Falls			Alta	27	
Leech Lake Dam	3 8)	Cody	2 45	
Roseau	T.		Dome Lake Evanston	2	
Virginia	2		Foxpark	18	
Montana			Lander	T.	
Browning	Т.		South Pass City	3	,
Red Lodge	2		Yellowstone Park	6	
#Ohoroiso #Filesti		† Y 2 2 21	SM seemement im	n ma otla-	hlo

*Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.

The ice conditions on the Great Lakes are as shown in the following telegram from the official in charge at Detroit, Mich:

Superior, extensive fields over west and extreme east portion. Whitefish Bay and St. Marys River solid. Green Bay, breaking up. Michigan, no fields west shore; some fields east shore and breaking up Charlevoix north to Straits. Huron, extensive fields north and east shore; none west and south. Rivers and Lake St. Clair open. Erie, west and central portions clear; extreme east, fields breaking up and running down Niagara River. Ontario, fields extreme east portion; harbors open.

P. C. DAY, Meteorologist, in charge of Division.

NOTE.—This issue is the last for the winter 1924-25. A brief report on ice conditions over the Great Lakes, issued from the Weather Bureau office at Detroit, Mich., will continue for a few weeks. Copies may be secured from that office.

